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Ministry
of the
Environment

FACTS

FOR ENVIRONMENTAL STUDIES

SET 1E

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Educational Resources Co-ordinator,
Information Services Branch,
Ministry of the Environment,
135 St. Clair Avenue West,
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Mini-poster
The Glut: A real life horror story
Waste Activity
Sludge Island Monsters
Noises, Noises Everywhere
What is Happening to Our Planet?



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This poster needs some color. Maybe you could have a coloring contest to see who could do the best job. Where should you pin up your poster? Do you think owners of stores would put yours in their window to help stop others from littering.



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A REAL-LIFE HORROR STORY



HOW MILD MEMBERS OF AN AVERAGE FAMILY TURN INTO THOUGHTLESS POLLUTERS

Reprinted from Fun with the Environment, U.S. Environmental Protection Agency, Washington, D.C.

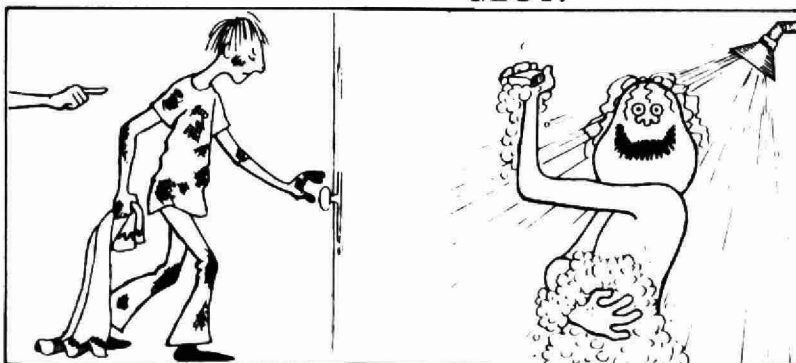


Brother Ben wants
to play some music.

But he plays it too
loud and becomes a
GLUT!

HOW TO UN-GLUT:
Respect other
people's right to
NOT hear it!
TURN IT DOWN!

Keep down
noise pollution.



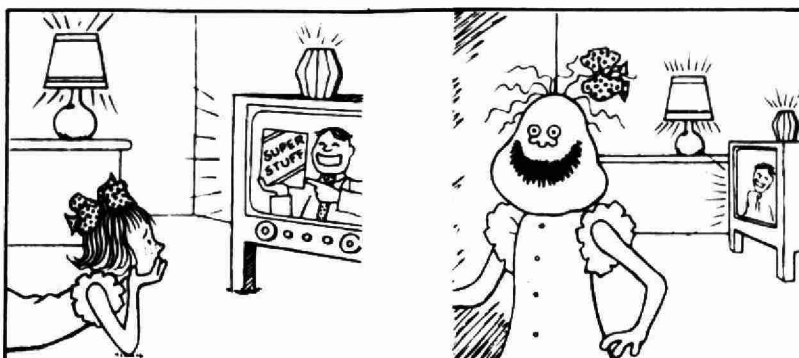
Brother Ben decides
to take a shower.

And he becomes a
GLUT by using
GALLONS of water.

HOW TO UN-GLUT:
1. Run just enough
water to get wet.
2. Turn off water.
3. "Soap up."
4. Turn on water.
5. Run just enough
water to rinse off.

**(The average shower takes
up to 60 gallons of water)!**

Save **GALLONS** of
water. Save the gas
that heats the water.



Sister Sue
decides to go
outdoors to play.

And she becomes a
GLUT when she
leaves the room.

HOW TO UN-GLUT:
Use just the lights
you need. Turn off
lights, TV and radio
when you are done
with them.

Save electricity and
help conserve our
energy.



Mrs. Average keeps a clean house.



But she uses many, many paper towels and becomes a **GLUT**

HOW TO UN-GLUT:

Make a rag bag. Worn-out clothes, towels and sheets are good cleaning rags. They can be washed again and again.



Sister Sue is an artist.



Now she's a **GLUT**! See how she's wasting paper!

HOW TO UN-GLUT:

Use both sides of the paper.



Mr. Average and brother Ben clean out the basement.



They throw away things that can still be used. **GLUTS**!

HOW TO UN-GLUT:

Others can use things you don't need. Recycle them – have a garage sale or give them to a charitable group. Find out where to give in your town.



After a picnic, the Averages find that the trash cans are full.



But the **GLUTS** leave their trash anyway!

HOW TO UN-GLUT:

If there's no place for it, take your trash home to your own trash can.

Remember:
Every
Litter Bit
Hurts!

**TO BECOME A GLUT
JUST UN-THINK!**

For Discussion:

1. What other types of **GLUTS** are there?
2. How can they **UNGLUT**?



seek and solve

T	H	E	T	R	A	S	H	R	E	S	L	E
B	I	R	T	T	E	E	R	L	A	L	S	L
U	I	L	O	V	A	E	A	A	R	I	A	E
D	N	D	S	T	M	R	O	W	O	G	I	C
N	T	H	R	E	U	A	L	N	I	R	I	T
T	W	E	I	T	L	I	I	L	G	E	T	R
E	E	V	A	D	T	E	O	N	W	O	R	I
S	U	N	U	T	E	S	S	D	U	O	L	C
E	I	M	E	F	W	E	E	D	O	N	T	S
T	P	R	E	U	S	E	W	A	R	T	T	O
C	A	O	R	E	W	E	A	O	M	U	S	T
R	E	C	L	Y	C	L	E	R	L	O	U	R
R	E	W	O	L	F	A	E	L	S	L	G	A
R	I	B	A	E	U	G	E	L	A	T	E	N
M	D	V	A	L	C	T	L	E	E	A	E	Y
R	A	R	E	O	N	U	E	M	G	R	I	M
A	T	N	P	R	O	U	G	S	A	R	G	E
H	R	O	M	U	N	D	O	R	B	S	A	T
N	D	R	E	A	P	L	M	A	E	C	E	A
U	N	N	E	E	D	D	S	E	G	E	D	L
L	S	E	D	O	R	E	N	E	A	O	N	S
U	P	D	N	O	E	I	I	S	B	E	S	W
W	I	I	T	D	U	S	T	H	R	O	Q	E
U	L	I	E	T	E	R	S	O	A	U	R	E
N	L	I	T	T	E	R	B	U	G	D	S	P

Directions:

This puzzle is called a chain reaction.

The words to find are listed below.

Notice that the first letter of every word is the same as the last letter of the word before it. Find the first word and then the following words will connect to each other. Put a line through the letters as you find the words. The letters that are left over form a poem below. Take the spare letters in the exact order they are written and fill them in the blanks. When the poem is completed, all the letters will be crossed out.

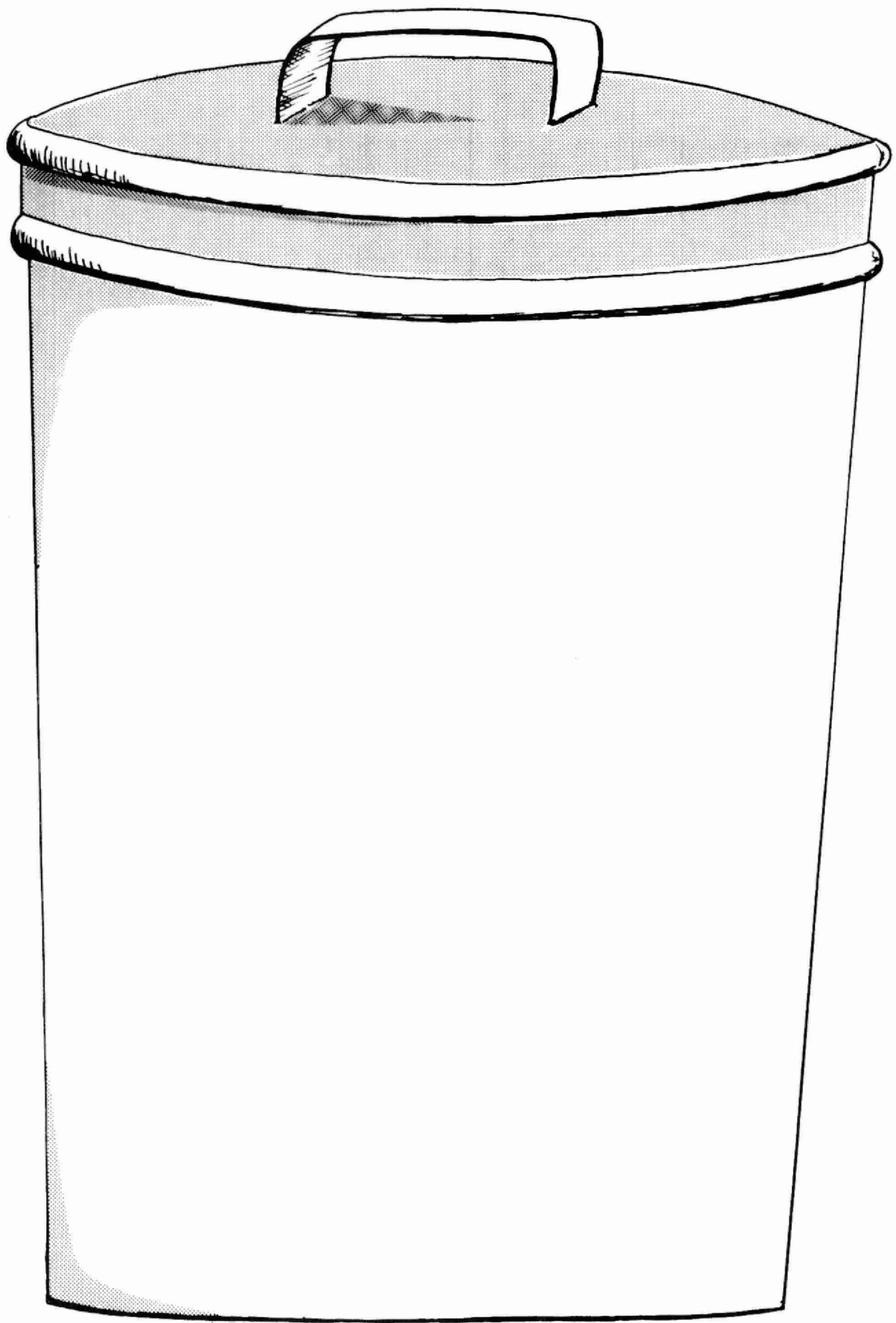
BUD	LAWN	EARS	SMELL	MANMADE	SWEEP
DIRT	NOISE	STEM	LEAF	ERODES	PROBES
TRASH	ELECTRIC	MY	FLOWER	SPILL	SEED
HEAT	CLOUDS	YELLOW	RIVER	LITTERBUG	DUST
TREES	SOIL	WEED	ROLE	GARBAGE BAG	TINS
SUN	LITTER	DUMP	EARTH	GRIM	SMOG
NATURAL	REUSE	POLLUTES	HARM	METALS	GREEN

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An Activity:

Using old magazines or newspapers, cut out little pictures of the things that most often end up as litter, and then paste these items in the garbage pail where they belong.



I SPY WITH MY EYE

There are two sets of pictures below. The two pictures on the bottom have ten things that are different from the ones on top. Find the missing things and write them in the spaces below each set. They are facing opposite directions but that is not one of the differences.



- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____
- 6 _____
- 7 _____
- 8 _____
- 9 _____
- 10 _____

For Discussion:

1. Why do people litter?
2. Which types of litter do not disappear?
3. How can you stop others from littering?

PUZZLE PIECES



For Discussion

1. *Where does garbage go?*
2. *What would happen if garbage was not taken away from your home?*
3. *Should people try to reduce the amount of garbage they produce?*

SLUDGE ISLAND MONSTERS



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By Joey Norton

"I'll meet you in twenty minutes," Felix whispered into the phone. "But what's up?" Gertie asked. "Can't you give me a hint?" "No, I'll tell you when I see you," he answered impatiently. Half an hour later Felix had told Gertie the whole plan and she was as excited as he was. "Okay. Now, you round up the kids on your block and I'll get Rudy and the others. We'll have a conference in the treehouse."

Finally, seven friends were sitting on the floor of the treehouse and Rudy, Felix and Gertie were standing in front of them. Felix called the meeting to order and everyone leaned forward to listen.

"Okay. Here's the plan," he said. "We're all fed up with going to bed early every night and having to do dishes and all those boring things, right?"

"Right!" they all echoed.

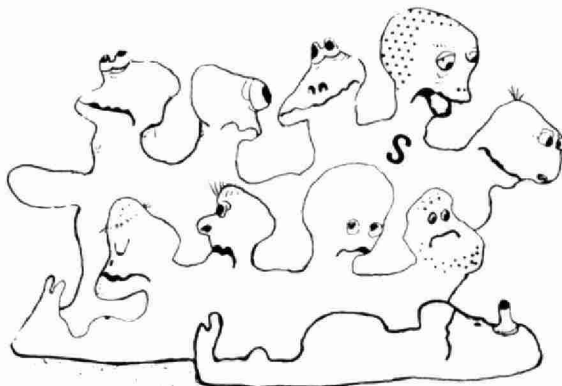
"And besides it's the summer holidays. So here's our idea. I've been checking out the scene and I've found the perfect place to build our own settlement. It's an island across the harbor and nobody even knows it exists. You can only reach it by boat. Rudy and I found it when we took our canoe trip last year and we named it Freedom Island. I am positive that no adult has ever seen it and we're going to keep it that way. Rudy and I have rounded up five canoes. We'll leave at six o'clock, Friday morning - two of us in each canoe. Each person is only allowed one knapsack with a few necessary clothes. Don't worry about food. We can fish and grow gardens. We just have to plan to work together and make this a tremendous success. Now, each of you go home and tell your parents and be back here on time Friday morning. Keep in mind that it's going to be a perfect home - only fresh, clean air, homegrown food, and a completely natural place. We won't have any of the problems of a city. But, we must always keep our slogans in mind. 'No pollution is our solution!' and, 'Keep a clean scene!'"

Okay, see you Friday."

The next few days flew by. They all had to explain the situation to their parents and families, pack their things, and make all the necessary arrangements before the big move.

Finally, Friday morning arrived and Gertie's father drove them down to the harbor. "I think it's a crazy idea but good luck," he said. "Remember, if it doesn't work, you're always welcome to come back home."

Rudy and Felix had taken many canoe trips, so they paddled quickly and safely. But the others weren't quite as experienced, so it took them nearly all day to cross the harbor. Suddenly, Rudy made a sharp turn to the left, and they wound their way through high bullrushes and thousands of lily pads. The others were sure they were lost and heading nowhere.



Then, all of a sudden, a beautiful, peaceful island appeared and Rudy and Felix both shouted, "This is it! Freedom Island!" They pulled the canoes up to shore. Nobody was quite prepared for how beautiful it actually was. Everyone stood on the land, speechless, and just stared at the lush green plants and the towering trees.

"This is how Jacques Cartier must have felt," Gertie said, "to see a land natural in its own beauty and completely untouched by man. We have to keep it this way and vow never to have the dirt or smells or noises that we had in the city."

The first week passed very smoothly. They divided the island into separate areas for sleeping, playing and for gardening. They planted hundreds of seeds and it was beginning to look like a well organized community.

The following Monday morning, Rudy awoke first and decided to try to catch a few fish for breakfast. As soon as he reached the canoes, he stopped dead in his tracks and just stared. He couldn't believe it! All along the shore on that side of their island, were hundreds of bags of garbage, tin cans, bottles, and mountains of litter. Rudy couldn't get over how ugly it looked and how horrible it smelled. "This is just like being back in the city," he thought. "It's exactly what we wanted to escape."

He scratched his head and tried to figure out where it could have come from. "Nobody in our group could have done it," he thought. "We didn't even have cans and bottles. But there is nobody else around for miles and nobody could ever even find this island." He ran back to where the others were sleeping.

"Wake up you guys!" he shouted. "Something awful has happened."

Everyone else was just as puzzled but they decided that the only thing to do was to dispose of it properly and to hope that it had been a mistake that would never happen again.

But it did happen again - the next two nights. Each time there was more garbage and it was thrown all over Freedom Island. Finally, on the fourth day, Felix and Rudy decided to keep watch all night. They each took a flashlight and set up their sleeping bags beside a tree and close to shore. They took turns staying awake while the other one slept.

At four o'clock in the morning, Rudy shook Felix to wake him up. "I think it's useless," he said. "The sun is already up and there hasn't been a sound all night." So they sat up and tried to figure out what to do.

"Obviously other people are around here," Felix said, "and if it's happened three times, it will happen again. They just decided to lie low for a while, I guess." They pondered over the problem until the others woke up. Rudy called an emergency meeting of the gang and together they realized that their only choice was to take a canoe trip around the area in search of the polluters.

As they headed towards the canoes, Gertie let out a loud cry. Everyone tore down to the water and hardly recognized it. The clear blue water of the day before was now murky and slimy. "Somebody has poured something into the water!" Gertie cried. "We can't even swim in it now!"

"The rest of you stay put," Rudy commanded. "Felix and I will settle this once and for all."

They paddled for hours and never saw a sign of life. Everything was as peaceful as it had been when the two boys first discovered the island. As they were heading back, Felix noticed a bit of land far to the east of Freedom Island. He pointed it out to Rudy and said, "It's probably nothing but maybe we should check it out." As they got closer, they discovered that it was an island far bigger than their own, and hidden by tiny islands around it.

There was no sign of life. They got out of the canoe and started trudging through the tall grass. Near the centre of the island, a chimney stuck up through the trees. Something seemed strange, so very nervously, they went to investigate.

It was a huge metal house that seemed ready to tumble at any moment. The strangest thing was that there didn't seem to be any doors or windows.

"How can anyone live here?" Rudy whispered to Felix.

But Felix was too terrified to even speak. Finally he said, "Maybe people are stuck in there and have no way of getting out. Why don't we leave? This place is weird."

Then it happened!

There was a thunderous crash and all at once a gigantic hand picked Rudy and Felix up into the air. Rudy looked up even higher and saw a face. It was greyish black and its eyes seemed to flash on and off like two bright lights. The boys were both petrified.

In a loud rumbling voice, it started to speak and with each word the island shook, or seemed to shake ... or was it just their trembling knees. "THIS IS SLUDGE ISLAND," he said. "GET OFF IT! MY NAME IS SILVERHEAD AND I WILL NOT GIVE YOU A SECOND CHANCE. GET OFF THIS PROPERTY!"

He dropped them both to the ground. They scrambled to their feet and ran faster than they had ever run in their lives. They reached the canoe and paddled frantically. Neither of them spoke until they were nearly back to Freedom Island.

Then Rudy said, in a weak, timid voice, "They're the ones, Felix. I know they are trying to destroy our island. What are we going to do?"

"Listen, Rudy," Felix pleaded. "Maybe it won't happen again. So, why don't we just try to forget it?" They both agreed, rather unconvincedly, that it was probably over. That night, everyone had trouble sleeping for fear that Silverhead and his monsters would show up on Freedom Island.

Each day that week something worse than the day before happened. The air was grey and dirty. The children could see pollution and even smell it. It was all from Sludge Island because they were burning trash and black smoke belched from the metal building's chimney. The pollution was beginning to cover their clothing and destroy their gardens. There were also loud and disturbing noises from the building night and day. The monsters were always working, so the noises, smells and garbage never stopped. Every morning, more and more garbage was dumped on Freedom Island.

By the end of the week, the children knew that something had to be done. The Sludge Island monsters kept their island reasonably clean, but had turned Freedom Island into a dirty, unhealthy place to live. So, Rudy and Felix planned to organize a meeting between all their friends and Silverhead and his gang. They set out that afternoon to visit Sludge Island again.

As they approached, they could see at least ten monsters all as scary looking as Silverhead. Some were sitting on the shore fishing, and others were working. As soon as they noticed the canoe, they all came towards the shore and stood side by side.

"They're nearly as tall as the trees," Felix said under his breath.

"Quick Felix," Rudy said, "we've got to show them we're friendly. Do something — anything!"

So, both boys started to wave and smile and give the peace signal. "Hi, Mr. Silverhead," Felix shouted, "we were just in the area so we thought we'd pop over and see how you were doing."

"Felix!" Rudy said in a stern, low voice. "Don't be silly. Just wave. They aren't friendly next-door neighbors."

As they reached shore, Silverhead came to the front and said in his booming voice, "WHAT HAVE YOU COME FOR?" "We want to discuss a problem, Silverhead. I mean Mr. Silverhead. I mean Sir!" Rudy said.

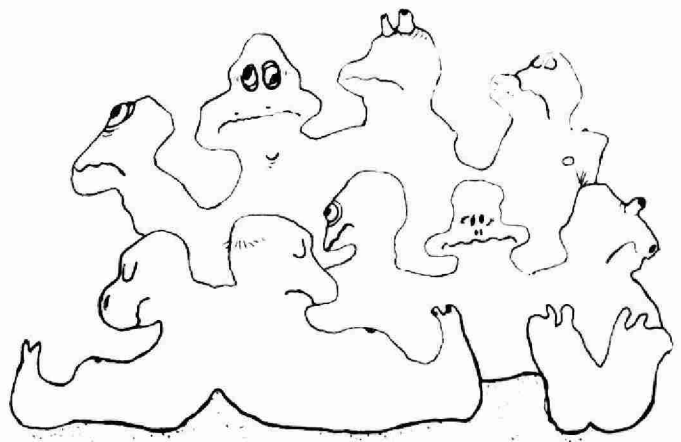
"THEN START DISCUSSING!" he boomed, "BUT DON'T STEP FOOT ON OUR ISLAND."

So Rudy started explaining the problem very quickly but very politely and he ended by saying, "So, we just want to know why you're sending all your pollution problems to us. It's destroying our island."

Silverhead and all the monsters had listened to everything Rudy said and finally Silverhead moved down to the canoe with one gigantic step. With his deep, rumbling voice he yelled, "LISTEN YOU FOOLS."

This story has two exciting parts. The first half is for you to read.

The second half is for you to write.





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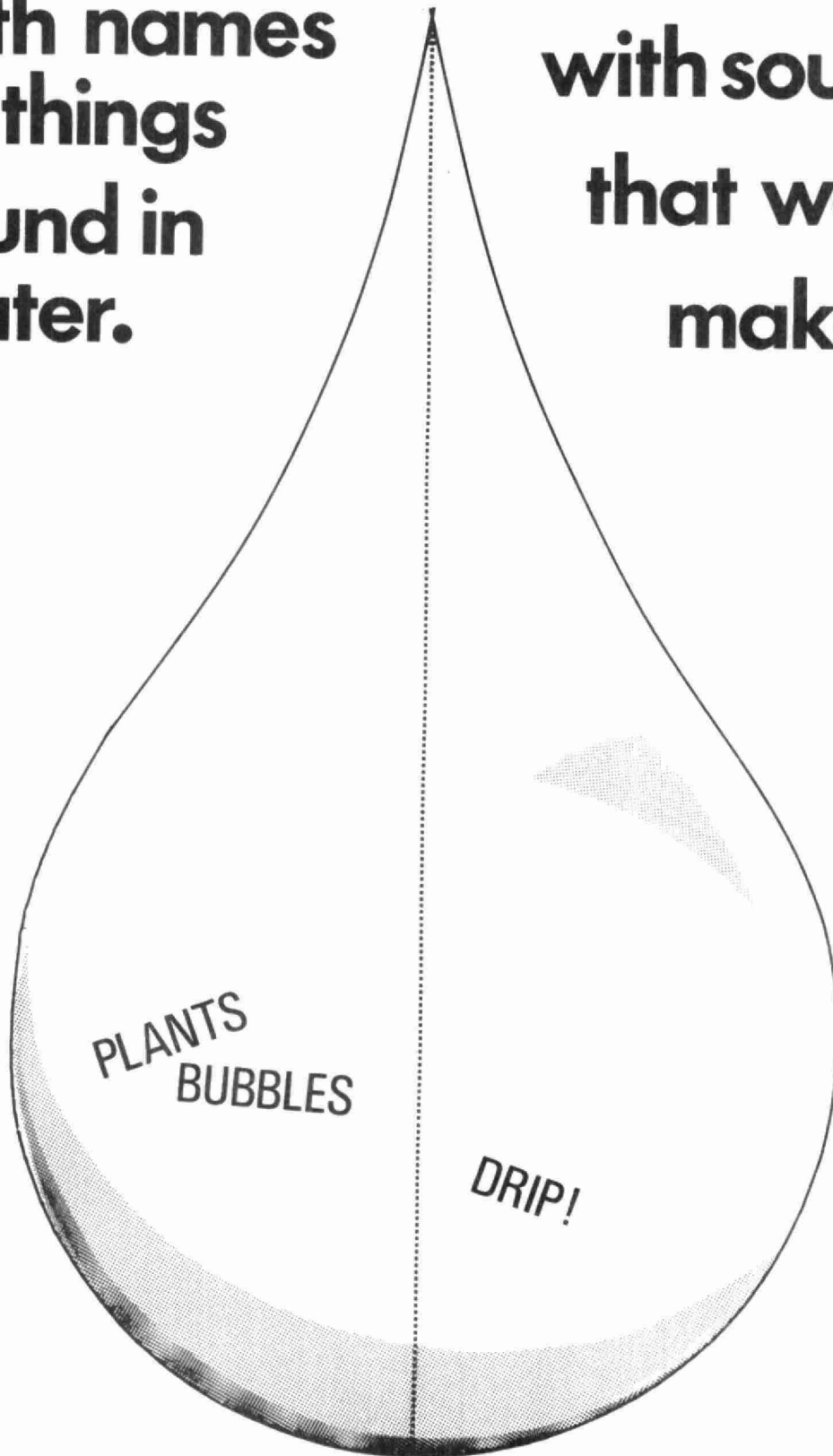
noises, noises, everywhere

NOISE IS ANOTHER FORM OF POLLUTION. IT IS UNWANTED SOUND. NOISE IS ALL AROUND US ANYWHERE WE GO AND ANYTIME OF THE DAY. COLOR EACH WORD BELOW. THEN TRY TO THINK OF AT LEAST FIVE OBJECTS THAT MAKE EACH PARTICULAR SOUND AND LIST THEM IN THE SPACE BESIDE EVERY WORD.



**Fill one side
of the drop
with names
of things
found in
water.**

**Then fill the
other side
with sounds
that water
makes.**

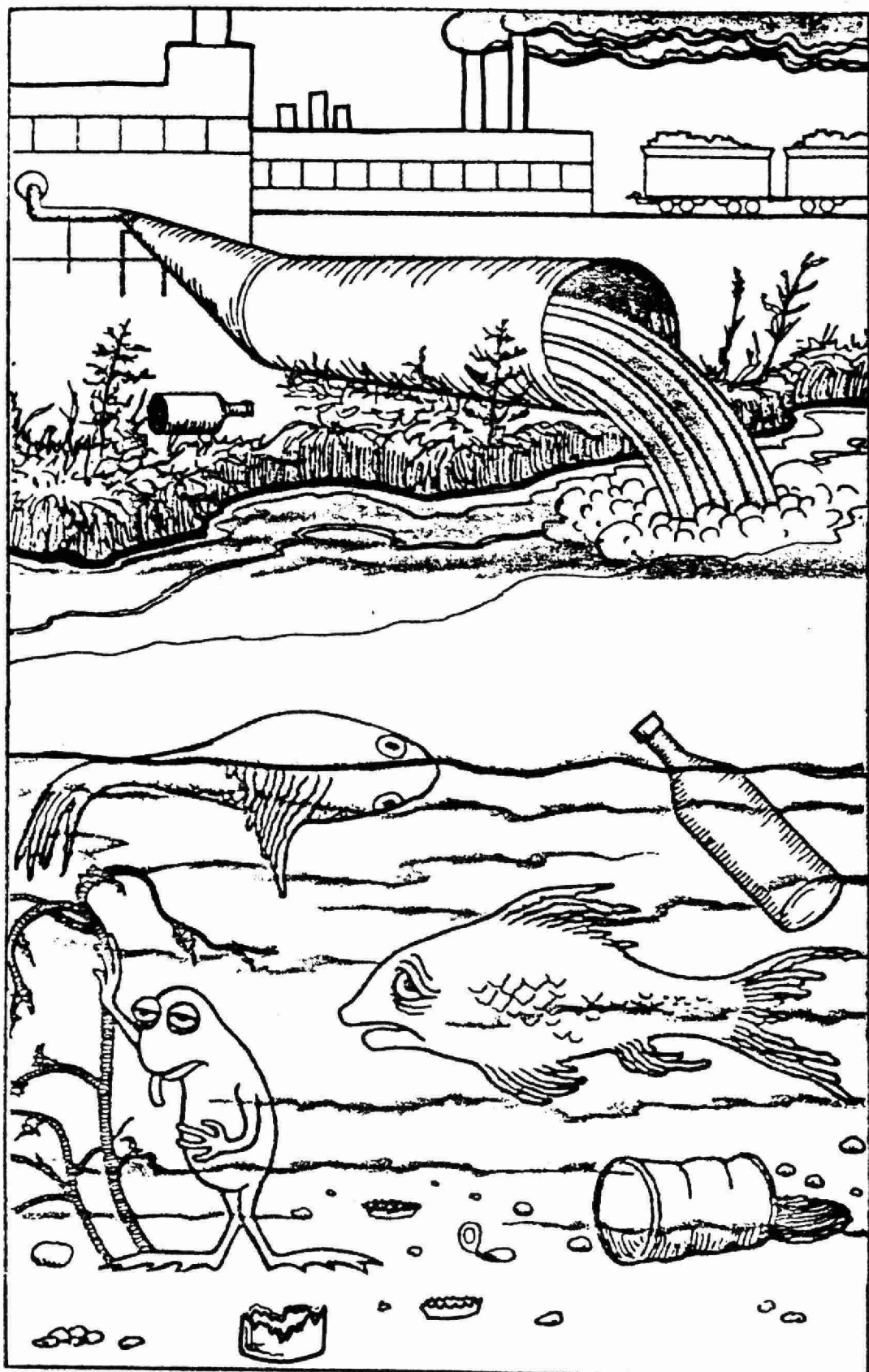


In Addition: List the ways man uses water in the right side of the drop, using a different color of pen or pencil. Add those things, on the left side, that man adds to the water as pollution. Discuss how people can reduce water pollution.

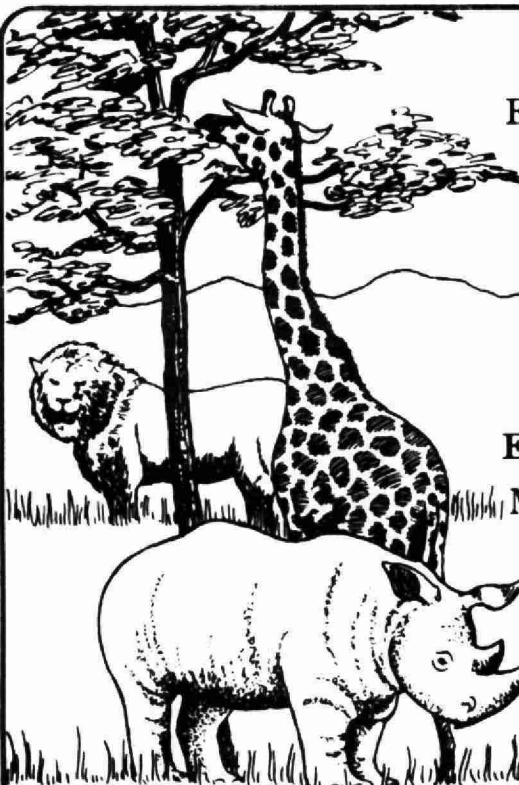
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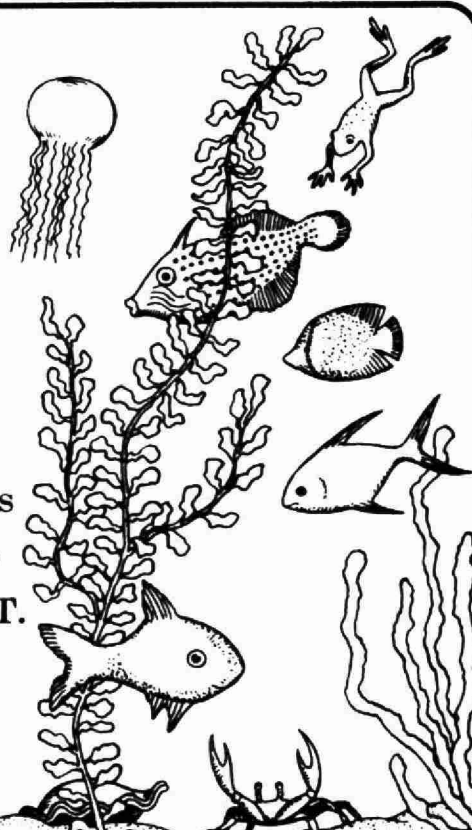


WHAT IS SAD.



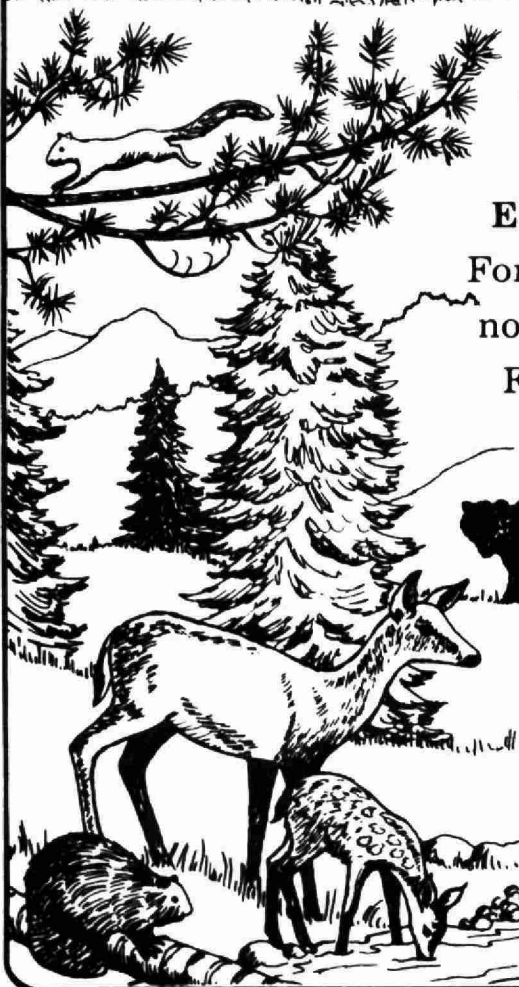
Each living thing
must have
EARTH,
WATER,
and **AIR**
in its

ENVIRONMENT.




Many living things
share the same
ENVIRONMENT.

Most plants
and animals
can not live
just anywhere.



They must have
just the right
ENVIRONMENT.

For some, it must
not be too hot.

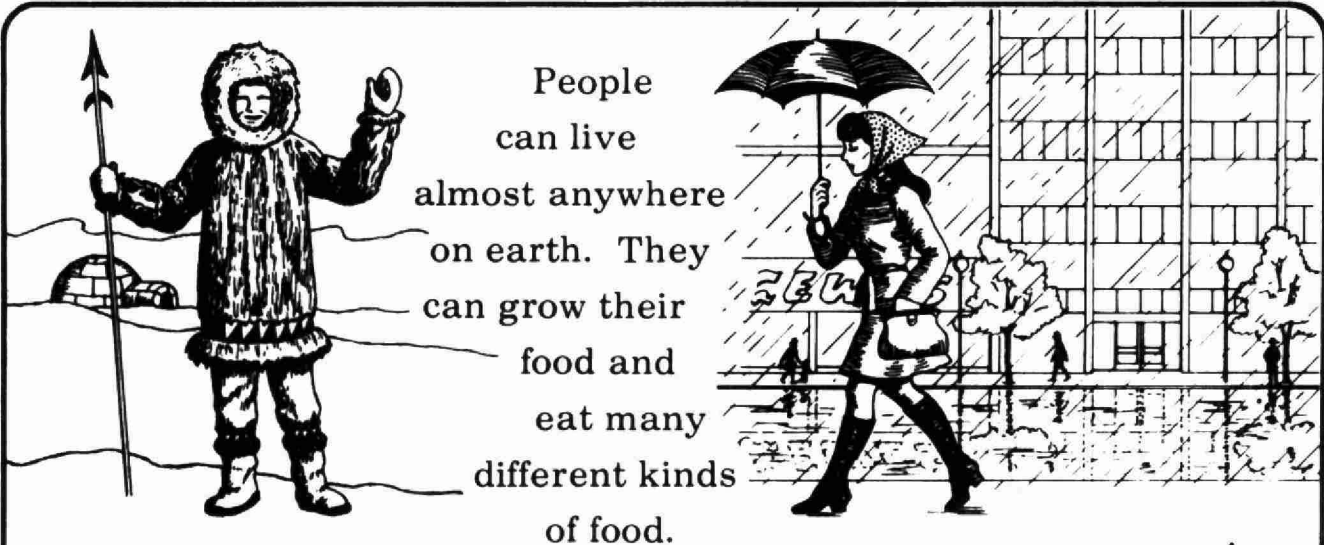


For some, it
must not be
too cold.

Most
eat only
certain foods
found
only in a
certain

ENVIRONMENT.

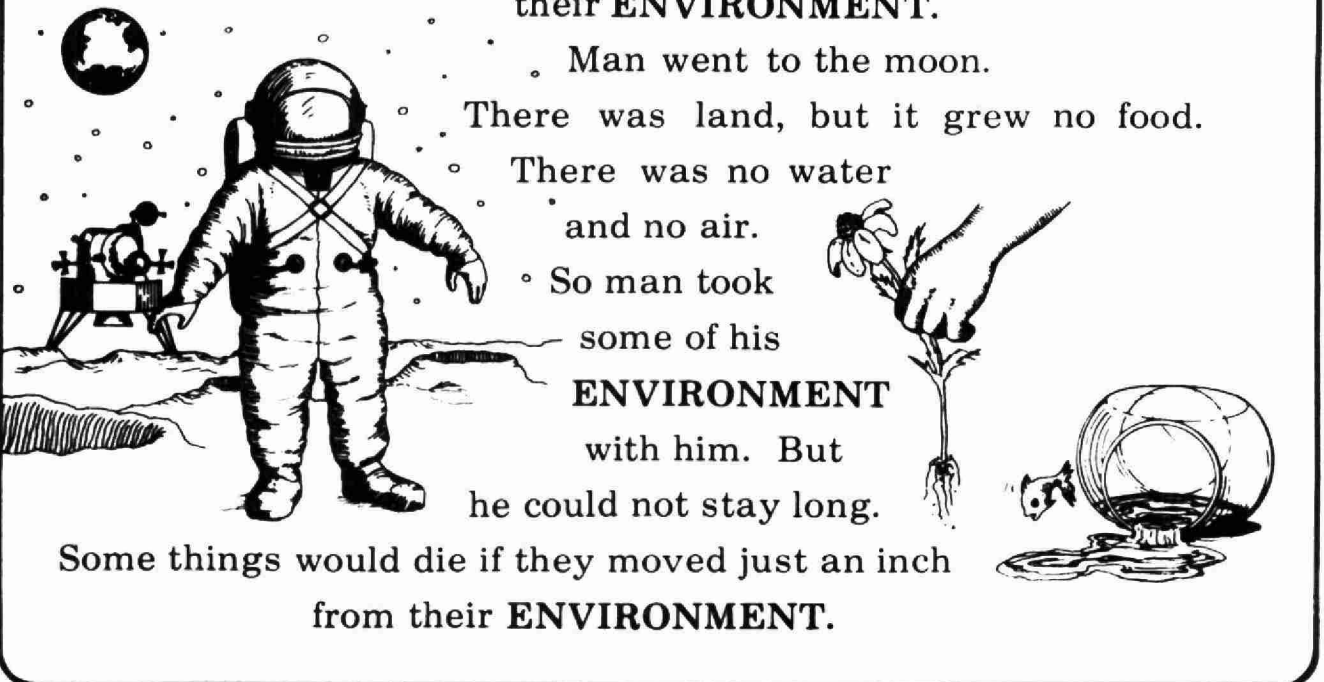




People
can live
almost anywhere
on earth. They
can grow their
food and
eat many
different kinds
of food.



People can
wear clothes
and build houses
to protect
themselves
from the
weather.
People can
even leave
their **ENVIRONMENT**.

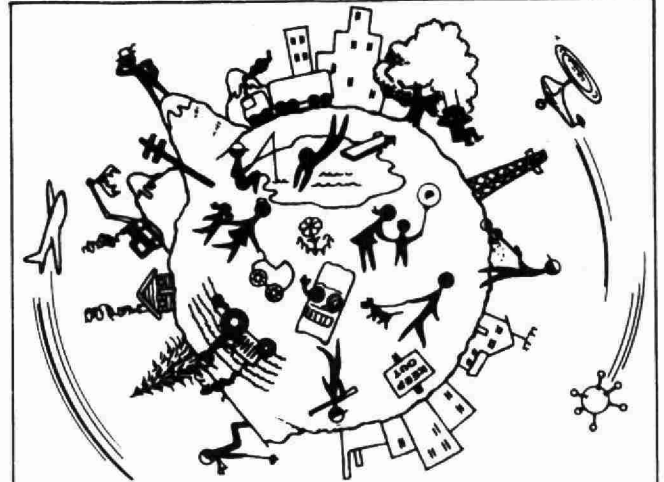


Man went to the moon.
There was land, but it grew no food.
There was no water
and no air.
So man took
some of his
ENVIRONMENT
with him. But
he could not stay long.
Some things would die if they moved just an inch
from their **ENVIRONMENT**.

Once upon a time,
there was
plenty of
room on
Earth for
all the
plants,
animals,
and
people.



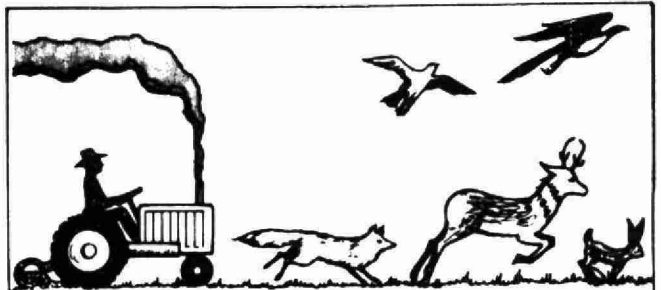
They all shared their
ENVIRONMENTS very nicely.



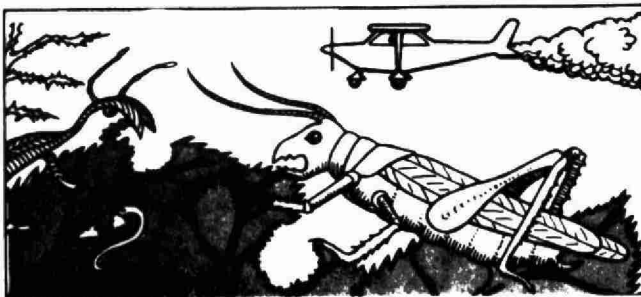
As the years went by, there were
more and more people.



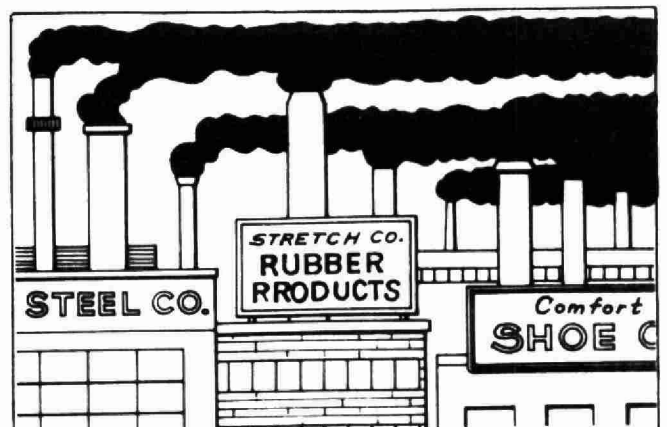
More people needed
more homes. To build them,
more trees were cut down. Wild
animals also used the trees
for homes. They had to move.



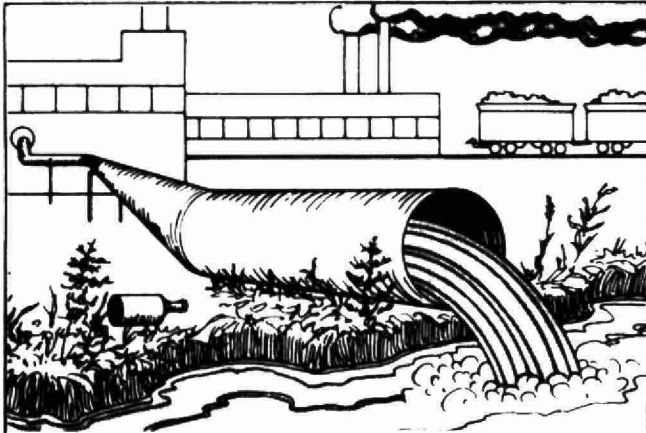
More people needed more food.
To grow more food, more
land was needed. The wild
animals had less and less
room and food. Soon there
were fewer wild animals.



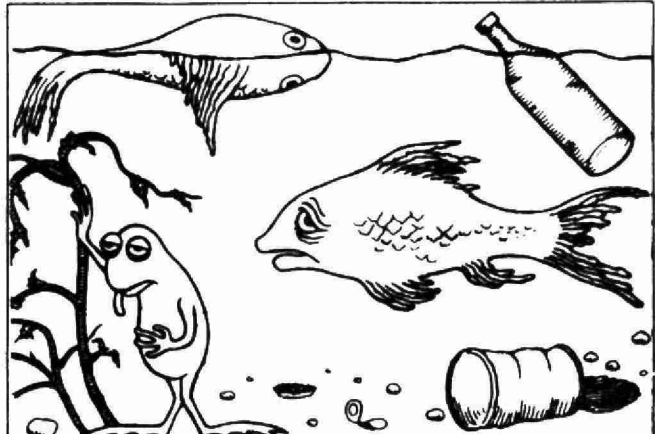
Insects ate much of man's
crops. So man began spraying
poison on the crops to kill
the insects. But the poison
also killed birds and other
animals that ate the insects.



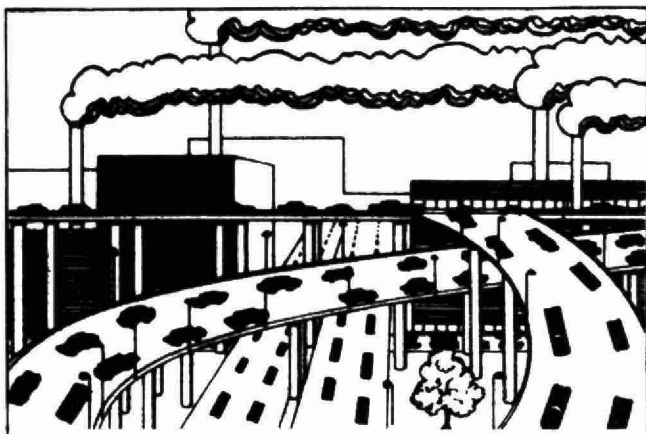
More people
needed more things.
More factories were built.



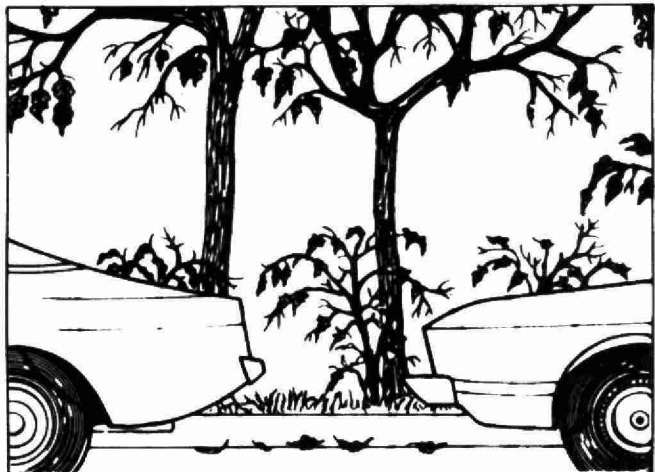
Factories use much water. Some factories pour used, dirty water back into the streams and rivers.



The animals that live in the streams and rivers began to get sick and die.



There were more and more cars. Fumes from cars and factories put poisons into the air.



Trees and plants in the cities began to get sick and die.



More people made more noise.



More people made more litter.



Man looked around
at his ENVIRONMENT.
Too much of it was dirty,
ugly, and noisy. Sometimes it
made PEOPLE get sick and die.



Man had been thoughtless
of his ENVIRONMENT.
He could not go back.
But he could not go on
being thoughtless.

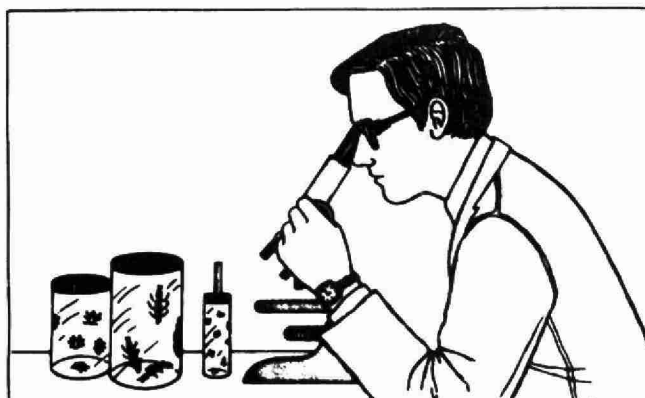
MAN BEGINS TO CLEAN UP HIS ENVIRONMENT.



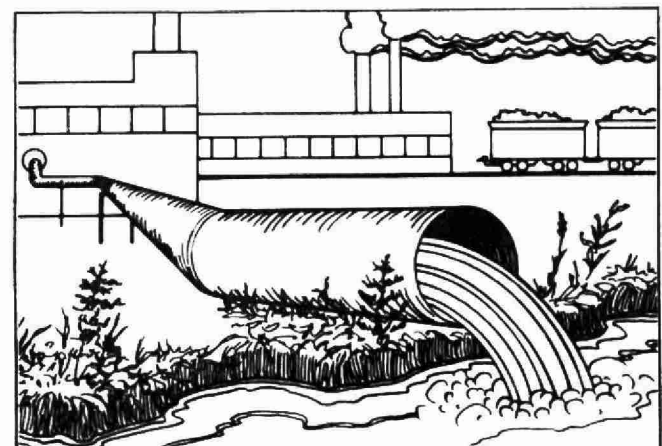
Young trees are being planted
as old trees are cut down.



There are places where wild
animals are protected. There
are laws to protect others.



Scientists are working to
find new ways to kill insects.
Ways which won't harm
birds and other animals.



More and more factories are taking
the poisons from their smoke and
cleaning their used water.



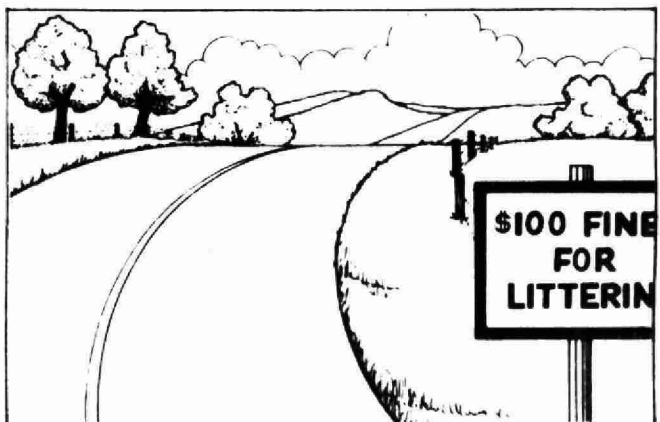
Engineers are working to design motors that won't poison the air.



City planners are working to beautify the cities. They are also trying to save open spaces for parks.



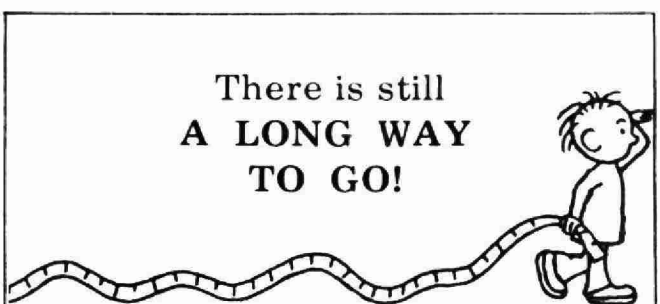
Many people are riding buses or bicycles. That means fewer cars on the streets.



Litter laws remind people to keep their environment clean.



Cities collect mountains of trash each day. Much of what fills up the dumps could be used again; or recycled. Many people now separate these things from their trash.



There is still
**A LONG WAY
TO GO!**

Much is being done to help the **ENVIRONMENT**.
MUCH MORE needs to be done!
EVERYONE needs to help!